

CLAIMS

1. The use of a multimeric alpha-lactalbumin in the preparation of therapeutically and/or prophylactically active antibacterial preparations, against infections, preferably of the respiratory tract, caused by bacteria, in particular S. pneumoniae and/or H. influenzae.
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2. Use according to claim 1, wherein the multimeric alpha-lactalbumin is present in a mixture of monomeric, dimeric and trimeric forms.
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3. Use according to claim 2, wherein the monomeric, dimeric, and trimeric forms are present in a weight ratio of about 15-7:5-2:1
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4. Use according to claim 3, wherein the monomeric, dimeric, and trimeric forms are present in a weight ratio of about 10:3:1
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5. Pharmaceutical composition comprising a therapeutically active amount of a protein as defined in any of claims 1-4 for the therapeutic and/or prophylactic treatment of infections, preferably in the respiratory tract, caused by bacteria, in particular S. pneumoniae and/or H. influenzae.
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6. Food and feed-stuff comprising an active amount of a protein as defined in any of claims 1-4 for the therapeutic and/or prophylactic treatment of infections, preferably in the respiratory tract, caused by bacteria, in particular S. pneumoniae and/or H. influenzae.
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7. Method for prophylactic and/or therapeutic treatment of infections caused by bacteria, in particular S. pneumoniae and/or H. influenzae, wherein a therapeutically active amount of a protein as defined in any of claims 1-4 is administered to mammals, including humans, optionally in combination with the- rapeutically inert expedients or nutrients:

8. Method according to claim 7, wherein the alpha-lactalbumin is administered to prevent adhesion of virulent bacteria.

5 9. Method according to claim 7, wherein the alpha-lactalbumin is administered to exert a bactericidal effect on the virulent bacteria.

10. Method according to claim 7, wherein the alpha-lactalbumin is administered to provide a bactericidal effect on a virulent bacteria.

15 11. Method for diagnosing infections caused by bacteria, in particular S. pneumoniae and/or H. influenzae, wherein a sample from the infected mammals, including man is extracted and determined with regard to adhesion visavi a protein as defined in any of claims 1-4.

20 12. Method for preparing a protein according to any of claims 1-4, wherein a monomeric alpha-lactalbumin is subjected to an ion-exchange chromatography.

13. Method according to claim 12, wherein the ion-exchange chromatography is carried out on a DEAE-Tris-acryl gel.

25 14. Method according to claim 13, wherein the eluting agent is NaCl having a linear gradient.

30 15. Method for preparing a therapeutically and/or prophylactically active antibacterial preparation against infections caused, preferably in the respiratory tract by S. pneumoniae and/or H. influenzae, whereby a therapeutically active amount of multimeric alpha-lactalbumin is combined with inert excipients.